image.

ARCH .		Application Number	mation unless it displays a valid OMB control number
TRANSMITTAL		Filing Date	November 20, 2000
FORM		First Named Inventor	Brett P. Monia et al.
(to be used for all correspondence after ini	tial filing)	Group Art Unit	1635
,		Examiner Name	J. Zara
otal Number of Pages in This Submission		Attorney Docket Number	ISIS0057-100 (ISPH-0519)
	ENCL	OSURES (check all that apply)	
Fee Transmittal Form	Assign	ment Papers Application)	After Allowance Communication to Group
Fee Attached	Drawir		Appeal Communication to Board of Appeals and Interferences
Amendment / Response	Licens	ing-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Final	Petitio	n	Proprietary Information
Affidavits/declaration(s)		n to Convert to a ional Application	Status Letter
Extension of Time Request	Power and C Addre	of Attorney with Revocation hange of Correspondence ss	Other Enclosure(s) (please identify below):
Express Abandonment Request	_	nal Disclaimer est for Refund	1) Table A 2) Statement Under 37 CFR 3.73(b) with executed Assignment
☐ Information Disclosure Statement	CD, N	lumber of CD(s)	3) Return Postcard
Certified Copy of Priority Document(s)	Rema	arks	
Response to Missing Parts/ Incomplete Application			
Response to Missing Parts under 37 CFR 1.52 or 1.53			
SIGNA	TURE OF	APPLICANT, ATTORNEY,	OR AGENT
Firm or Paul K. Legaard, F	Registration	No. 38,534	
Signature Detail	1	0	
Date September 26, 200	03		
	CI	ERTIFICATE OF MAILING	

Date September 26, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents Washington, DC 20231

Sir:

POWER OF ATTORNEY WITH REVOCATION AND CHANGE OF CORRESPONDENCE ADDRESS

I hereby revoke all previous powers of attorney or authorizations of agent given in the patents/applications identified in Table A attached hereto, and appoint PLATERIAL BERGE BAR CODE 413 SERE PATENT TRADEMARK OFFICE PATENT TRADEMARK OFFICE
as ray/our attorney(s) or agent(s) to prosecute the patents/applications identified in Table A,
and to transact all business in the United States Patent and Trademark Office connected therewith.
Please change the Correspondence Address for the patent applications identified in Table A to: Practitioners at Customer Number: 34138
I am the:
Applicant/Inventor.
Assignee of record of the entire interest. (A statement under 37 CFR 3.73(b) is enclosed.)
Respectfully submitted,
ISIS PHARMACEUTICALS, INC.
Date: 7/22/2003 By:

By:

Name: B. Lynne Parshall Title: Executive Vice President

::ODMA\PCDOCS\PHILA1\1821739\L



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents Washington, DC 20231

Sir:

STATEMENT UNDER 37 CFR 3.73(b)

Applicant, ISIS Pharmaceuticals, Inc., a corporation, states that it is:

the assignee of the entire right, title, and interest of the patents/applications identified in Table A attached hereto.

The extent (by, percentage) of its ownership interest is 100% in the patents/applications identified in Table A.

By:

a copy of the pertinent assignment from the inventor(s) of the patent applications identified in Table A is enclosed herewith.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Respectfully submitted,

ISIS PHARMACEUTICALS, INC.

Date: 7/22/2003

Name: B. Lynne Parshall

Title: Executive Vice President

DOCKET NO.: ISPH-0519 PATENT

ASSIGNMENT

WHEREAS, We, Brett P. Monia, of La Costa, State of California; Lex M. Cowsert, of Carlsbad, State of California, Susan Murray, of Poway, State of California, Madeline M. Butler, of Rancho Santa Fe, State of California; and Nicholas M. Dean, of Olivenhain, State of California, have invented a certain invention entitled Antisense Modulation of P13K P85 Expression, for which we have made application for Letters Patent of the United States, said application having been filed November 20, 2000 and assigned Application No. 09/715,983; and

WHEREAS, ISIS Pharmaceuticals, Inc. hereinafter referred to as the assignee, of 2292 Faraday Avenue, Carlsbad CA, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all

DOCKET NO.: ISPH-0519 PATENT

countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said nominees, successors, assigns, its assignee, representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any

DOCKET NO.: ISPH-0519 PATENT

and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

DATED:	2	1	2001

BRETT P. MONIA

State of California)) ss.
County of San Diego)

LANE B.D. SCHWARTZ
Commission # 1196197
Notary Public - California
San Diego County
My Comm. Expires Sep 13, 2002.

WITNESS my hand and official seal.

ignature of Notary

PATENT DOCKET NO.: ISPH-0519 DATED: 1/31/01, 2001 State of California)
County of San Diego) On this 6/6 day of anuary, 2001, before me, the undersigned, a Notary Public for the state, personally appeared Lex M. Cowsert, personally known to me/preved to me on the basis of satisfactory evidence to be the person who subscribed the foregoing Assignment and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment. WITNESS my hand and official seal. LANE B.D. SCHWARTZ Commission # 1196197 Notary Public - California San Diego County My Comm. Expires Sep 13, 2002 Signature of Notary DATED: 1/19 , 2001 State of California ss. County of San Diego On this 19 day of musky, 2001, before me, the undersigned, a Notary Public for the state, personally appeared Susan Murray, personally known to me/proved to me on the basis of satisfactory evidence to be the person who subscribed the

foregoing Assignment and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

Signature of Notary

LANE B.D. SCHWARTZ Commission # 1196197 Notary Public - California San Diego County My Comm. Expires Sep 13, 2002 WITNESS my hand and official seal.

PATENT

DOCKET NO.: ISPH-0519

DATED: <u>Jan 31</u> , 2001	Modeline M. Butle
State of California)) ss.
County of San Diego)
2184	down of Champands 2001, before me,

On this day of much, 2001, before me, the undersigned, a Notary Public for the state, personally appeared Madeline M. Butler, personally known to me/proved to me on the basis of satisfactory evidence to be the person who subscribed the foregoing Assignment and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

LANE B.D. SCHWARTZ
Commission # 1196197
Notary Public - California
San Diego County
My Comm. Expires Sep 13, 2002

WITNESS my hand and official seal.

Signature of Notary

DATED: 1/30 , 2001

NICHOLAS M. DEAN

State of California

ss.

County of San Diego

On this day of <u>lanuary</u>, 2001, before me, the undersigned, a Notary Public for the state, personally appeared <u>Nicholas M. Dean</u>, personally known to me/proved to me on the <u>basis of satisfactory evidence</u> to be the person who subscribed the foregoing Assignment and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the Assignment the person, or the entity on behalf of which the person acted, executed the Assignment.

ionature

LANE B.D. SCHWARTZ
Commission # 1196197
Notary Public - California
San Diego County
My Comm. ExpresSep 13, 2002

WITNESS my hand and official seal.

Table A

Coriol No	Filing Date	Inventor(s)	Examiner	Art	Title
Patent No.	Issue Date			—	
09/577,902 6,284,538	May 24, 2000 September 4, 2001	B. Monia et al.	M. Schmidt	1635	ANTISENSE INHIBITION OF PTEN EXPRESSION
ISIS0004-102 09/048,810 6,238,921 ISIS0052-101	March 26, 1998 May 29, 2001	L. Miraglia et al.	M. Shibuya	1635	ANTISENSE OLIGONUCLEOTIDE MODULATION OF HUMAN MDM2 EXPRESSION
09/280,805 6,184,212	March 26, 1999 February 6, 2001	L. Miraglia et al.	J. Epps	1635	ANTISENSE MODULATION OF HUMAN MDM2 EXPRESSION
09/731,457 ISIS0053-100	December 6, 2000	I. Popoff et al.	J. Schultz	1635	ANTISENSE MODULATON OF DAMAGE SPECIFIC DNA BINDING PROTEIN 1, P127 EXPRESSION
09/659,860 ISIS0054-100	September 11, 2000	H. Zhang et al.	J. Schultz	1635	ANTISENSE MODULATION OF CASPASE 7 EXPRESSION
10/007,078 ISIS0055-100	November 8, 2001	D. Ward et al.	J. Schultz	1635	ANTISENSE MODULATION OF EIF2C1 EXPRESSION
09/953,611 ISIS0056-100	September 13, 2001	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF PROTEIN KINASE R EXPRESSION
09/715,983 ISIS0057-100	November 20, 2000	B. Monia et al.	J. Zara	1635	ANTISENSE MODULATION OF PI3K P85 EXPRESSION
09/344,521 6,100,090	June 25, 1999 August 8, 2000	B. Monia et al.	J. Zara	1635	ANTISENSE INHIBITION OF PI3K P85 EXPRESSION
09/954,679 ISIS0058-100	September 12, 2001	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RIBONUCLEASE L EXPRESSION
09/484,617 6,303,374 ISIS0059-100	January 18, 2000 October 16, 2001	H. Zhang et al.	S. McGarry	1635	ANTISENSE MODULATION OF CASPASE 3 EXPRESSION

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Serial No.	Filing Date Issue Date	Inventor(s)	Examiner	Art Unit	Title
09/679,298 6,566,131	October 4, 2000 May 20, 2003	L. Cowsert	M. Schmidt	1635	ANTISENSE MODULATION OF SMAD6 EXPRESSION
6,566,135	October 4, 2000 May 20, 2003	A. Watt	J. Zara	1635	ANTISENSE MODULATION OF CASPASE 6 EXPRESSION
6,444,466	May 10, 2001 September 3, 2002	D. Ward et al.	J. LeGuyader	1635	ANTISENSE MODULATION OF HELICASE- MOI EXPRESSION
10/001,863 ISIS0063-100	November 19, 2001	J. Karras et al.	To Be Determined	1645	ANTISENSE MODULATION OF TOLL-LIKE RECEPTOR 4 EXPRESSION
09/865,993 ISIS0064-100	May 25, 2001	B. Monia et al.	J. Zara	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 5 EXPRESSION
09/667,018 ISIS0065-100	September 20, 2000	H. Zhang et al.	J. Schultz	1635	ANTISENSE MODULATION OF CASPASE 2 EXPRESSION
10/271,887 ISIS0066-100	October 15, 2002	H. Zhang et al.	To Be Determined	1635	ANTISENSE MODULATION OF CASPASE 9 EXPRESSION
09/659,845 6,492,170	September 11, 2000 December 10, 2002	A. Watt	A. Wang	1639	ANTISENSE MODULATION OF CASPASE 9 EXPRESSION
10/309,362 ISIS0067-100	December 3, 2002	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF RECQL5 EXPRESSION
10/238,443 ISIS0067-101	September 9, 2002	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF RECQL5 EXPRESSION
09/798,185 ISIS0067-102	March 1, 2001	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RECOLS EXPRESSION
09/798,096 6,399,378 ISIS0068-100	March 1, 2001 June 4, 2002	D. Ward et al.	S. McGarry	1635	ANTISENSE MODULATION OF RECOL2 EXPRESSION

Serial No.	Filing Date	Inventor(s)	Examiner		Title
Patent No.	Issue Date			Unit	
09/792,594 6,436,706	February 23, 2001 August 20, 2002	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RECQL4 EXPRESSION
09/793,807 ISIS0070-100	February 23, 2001	D. Ward et al.	J. Zara	1635	ANTISENSE MODULATION OF RECOL EXPRESSION
09/358,381 6,020,199	July 21, 1999 February 1, 2000	B. Monia et al.	M. Schmidt	1635	ANTISENSE MODULATION OF PTEN EXPRESSION
10/006,430 ISIS0072-100	December 10, 2001	M. Graham et al.	S. McGarry	1635	ANTISENSE MODULATION OF CD81 EXPRESSION
10/175,492 ISIS0073-100	June 17, 2002	K. Dobie et al.	To Be Determined	1645	ANTISENSE MODULATION OF PAZ/PIWI DOMAIN CONTAINING PROTEIN EXPRESSION
10/199,221 ISIS0074-100	July 18, 2002	B. Monia et al.	J. Epps	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 6 EXPRESSION
09/487,444 6,159,697 ISISO075-100	January 19, 2000 December 12, 2000	B. Monia et al.	A. Wang	1635	ANTISENSE MODULATION OF SMAD7 EXPRESSION
10/181,603 ISIS0075-101	July 17, 2002	B. Monia et al.	To Be Determined	1651	ANTISENSE MODULATION OF SMAD7 EXPRESSION
09/732,199 6,379,960 ISIS0076-100	December 6, 2000 April 30, 2002	I. Popoff et al.	M. Schmidt	1635	ANTISENSE MODULATION OF DAMAGE- SPECIFIC DNA BINDING PROTEIN 2, p48 EXPRESSION
09/920,668 6,482,644 ISIS0077-100	August 1, 2001 November 19, 2002	L. Cowsert	M. Schmidt	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
09/922,146 6,566,133 ISIS0078-100	August 1, 2001 May 20, 2003	L. Cowsert	T. Gibbs	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION

Serial No. Patent No.	Filing Date Issue Date	Inventor(s)	Examiner	Art Unit	Title
Docket No.					O LOVOUVO LO MONTA III COM LONGINI
09/487,445	January 19, 2000	H. Zhang et al. M. Shibuya		1635	1635 ANTISENSE MODULATION OF CASPASE o
6,258,600	July 10, 2001				EXTRIBUTION
ISIS0079-100					
10/181,177	July 12, 2002	H. Zhang et al.	To Be Determined	1632	Zhang et al. To Be Determined 1632 ANTISENSE MODULATION OF CASPASE 8
ISIS0079-101					EXPRESSION